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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------------|------------------------|---------------------|------------------|
| 10/602,985 | 06/24/2003 | Gmham John Gibson Juby | 2030 | |
| 7: | 590 07/20/2004 | | EXAM | INER |
| LAW OFFICE | ES OF DENNIS W. E | PRINCE, FRED G | | |
| Suite C-2 | | | | |
| 19900 Beach B | lvd. | ART UNIT | PAPER NUMBER | |
| Huntington, Ca | A 92648 | 1724 | | |

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | Application No. | Applicant(s) | | | | | |
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| Office Action Commence | 10/602,985 | JUBY ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Fred Prince | 1724 | | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | correspondence address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed on 24 Ju | N⊠ Responsive to communication(s) filed on <u>24 June 2003</u> . | | | | | | |
| _ | | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| closed in accordance with the practice under <i>E</i> | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | | |
| 4) ☐ Claim(s) 1-17 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) 9-11 and 13-17 is/are allowed. 6) ☐ Claim(s) 1-8 and 12 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or | | and the same and t | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examiner | ۲. | | | | | | |
| 10)⊠ The drawing(s) filed on is/are: a)□ acce | ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☑ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the o | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| ••• | | | | | | | |
| Attachment(s) Notice of References Cited (PTO-892) | A) Interview Comme | (PTO 442) | | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | | | | | | |

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DETAILED ACTION

Drawings

1. The drawings are objected to because in Figures 2 and 4-7 the lines, numbers, and letters are not uniformly thick and well defined.

Priority

2. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The specification must indicate the status of the two US non-provisional applications from which the instant application claims priority (e.g., abandoned).

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-8 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. The term "high-rate" in claims 1 and 12 is a relative term which renders the claims indefinite. The term "high-rate" is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

6. Claim 1 recites the limitation "said high-rate anaerobic digestion process" in lines 8-9. There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

- 7. Claims 9-11 and 13-17 are allowed.
- 8. Claims 1-8 and 12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
- 9. The following is a statement of reasons for the indication of allowable subject matter:

While it is known to provide the steps of treating wastewater in a process which does not utilize aerobic biological treatment, wherein the effluent is suitable for membrane filtration to produce refined water, and the waste stream comprises organic and inorganic chemicals (see US Pat No 4,000,065 to Ladha et al. or US Pat No 5,028,336 to Bartels et al.) and it is known in the art to use an upflow anaerobic sludge blanket system in combination with a membrane (see US Pat No. 6,113,789 to Burke) in the examiner's opinion, the prior art fails to teach or fairly suggest the step of routing the wastewater through an anaerobic digestion process or an upflow anaerobic sludge blanket to stabilize the soluble matter and produce methane. Stabilizing the soluble organics and removing soluble organics and inorganic salts via the membrane in an anaerobic process which does not include aerobic biological treatment simplifies the treatment process and results in high quality water product as described in the instant specification.

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Per claim 10, it is known to provide the steps of treating wastewater in a process which does not utilize aerobic biological treatment, wherein the effluent is suitable for membrane filtration to produce refined water, and the waste stream comprises organic and inorganic chemicals (see US Pat No 4,000,065 to Ladha et al. or US Pat No 5,028,336 to Bartels et al.) the prior art fails to teach or fairly suggest a solids thickening element in communication with a secondary membrane element having the recited positioning and operational elements.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References are cited of interest to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Prince whose telephone number is (571) 272-1165. The examiner can normally be reached on Monday-Thursday, 6:30-4:00; alt. Fridays 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred Prince
Primary Examiner
Art Unit 1724

fgp 7/13/04